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ABSTRACT

The purpose of this study was to examine the effects of gender and three modes of story reconstruction training on second-grade students' story comprehension. Thirty-six children were randomly assigned to three treatment groups: drawing, discussion, and thematic-fantasy play. On three separate occasions, students were read books and participated in one of the training conditions. After the third session, students' story retellings were collected as a measure of their story comprehension. These retellings were coded according to the Stein and Glenn story schema analysis. Two-way analyses of variance revealed that second graders who participated in thematic-fantasy play training included a significantly greater number of propositions, attempt statements, and end states in their retellings than did children who participated in the drawing condition. Males in the thematic-fantasy play training condition included significantly more direct consequence statements in their retellings than did males in the discussion condition. No main effects were found for gender or for any of the dependent variables. Results suggested that teachers aiming to increase comprehension and understanding of story structure might consider thematic-fantasy play activities, which involve students in discussions of appropriate roles and actions and in accommodating other students' points of view. (Author/RH)

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An Application of the Stein and Glenn Story Schema Model to Second Graders' Retellings of Little Red Cap

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ABSTRACT

The purpose of this study was to examine the effects of gender and three modes of story reconstruction training on second graders' story comprehension. Thirty-six second grade children were randomly assigned to three treatment groups: drawing, discussion, and thematic-fantasy play. On three separate occasions, students were read books and participated in one of the training conditions. After the third session, students' story retellings were collected as a measure of story comprehension. These retellings were coded using the Stein and Glenn story schema analysis. Two-way analyses of variance revealed that second graders' who participated in thematic-fantasy play training included a significantly greater number of propositions, attempt statements, and end states in their retellings than did the children who participated in the drawing condition. Males in the thematic-fantasy play training condition included significantly more direct consequence statements in their retellings than did males in the discussion condition. There were no main effects found for gender or any of the dependent variables.

An Application of the Stein and Glenn Story Schema Model to Second Graders' Retellings of Little Red Cap

Story schema theories have been used by researchers to analyze developmental differences in knowledge of story structure (Stein & Glenn, 1979; Mandler & Johnson, 1977; Yussen, Mathews, Buss, & Kane, 1980; Whaley, 1981). Knowledge of story structure is important in that it seems to aid children's story comprehension and memory (Stein & Glenn, 1979; Whaley, 1981). Yet research using story schemas as a means of assessing the effectiveness of instructional strategies is lacking.

Research has generally found that sociodramatic and fantasy play have positive effects on preschool children's story comprehension (Saltz & Johnson, 1974; Saltz, Dixon, & Johnson, 1977; Dansky, 1980; Pellegrini & Galda, 1982). In the Saltz, Dixon, & Johnson (1977) study, each of the four classes of preschoolers was exposed to one of the following conditions: thematic-fantasy play, fantasy discussion, sociodramatic play, and constructive activities. Story verbalization skills were measured by analyzing stories children told about a series of pictures. For this skill, and a number of other cognitive measures, children in the thematic-fantasy play group did better than the children in the other groups; the fantasy discussion and constructive activities groups scored similarly. The authors concluded that the thematic-fantasy play was a more effective facilitator of story comprehension than sociodramatic play.

Other researchers (Sachs, 1980; Rubin, 1980) have also taken the position that fantasy play facilitates story

comprehension. Sachs (1980) suggested that the process of verbally defining and negotiating roles and props helps children develop narrative skills.

The present study assessed the effects of gender and three different instructional strategies (thematic-fantasy play, discussion, and drawing) on second graders' story comprehension as measured by analyzing their retellings of a story according to the following components of Stein and Glenn's story schema model:

1. the number of propositions,
2. the number of different categories,
3. the frequency of recall of the various categories (episode, setting, initiating event, internal response, attempt, and direct consequence),
4. the number of different types of information included with each category, and
5. the frequency of each type of information included within the categories (state, action, affect, cognition, and end state).

It was predicted that children in the thematic-fantasy play group would recall more of the components of Stein and Glenn's story schema than the children in the discussion and drawings group.

Method

The present study reanalyzed the data from Pellegrini and Galda (1982). The sample of the original study consisted of kindergarten, first, and second grade children from a low income, racially mixed, rural school in northeast Georgia. The sample for the present study consisted of only the 18 male and 17 female second grade students. The children were

randomly selected from the total second grade population and were randomly assigned to groups of four (two boys and two girls). Each group was read three different stories by experimenters on three separate occasions. Following each story children were exposed to one of three treatments (thematic-fantasy play, discussion, or drawing). After each treatment individual children were asked to retell the story.

Retellings for the last story from each child were first divided into propositions. Propositions were then coded as setting statements and as episodes corresponding to the original story. The episodes were divided into seven categories: initiating events, internal responses, internal plans, attempts, direct consequences, and reactions. Within each category, five types of information were coded: states, actions, goals, affects, cognitions, and end states.

The independent variables were gender and cognition (play, discussion, and drawing). There were a total of fourteen dependent variables: total propositions, different categories used, episode, setting, initiating event, internal response, attempt, direct consequence, different types of information used, state, action, affect, cognition, and end state. Two-way analyses of variance were used to evaluate differences in the dependent variables associated with the independent variables of condition and gender.

Results

There were no main effects found for gender or any of the dependent variables. The main effect of the condition variable was associated with significant differences in

three of the dependent variables: total number of propositions ($F(2,32) = 3.653$, $p < .04$), attempt statements ($F(2,32) = 3.376$, $p < .05$), and end states ($F(2,32) = 3.899$, $p < .03$). Post hoc analyses (Scheffe tests at the .05 level) revealed that children in the play group had significantly higher scores than children in the drawing group for all three variables. Finally, one significant two-way interaction (gender x condition) was found for the direct consequence statements ($F(2,32) = 3.610$, $p < .04$). Post hoc analyses (Scheffe tests at the .05 level) showed that males in the play group included significantly more direct consequence statements in their retellings than did males in the discussion group.

Discussion

The thematic-fantasy play condition provided opportunities for children to interact with their peers, to be creative, and to be active participants. Children had to accommodate to others' points of view and to express themselves verbally in order to define their roles and to discuss appropriate actions. The children in the play condition provided longer retellings and more information about story categories in their retellings than did children in the discussion and drawing conditions. Thematic-fantasy play seemed to have a greater effect on second grade boys' recall of the direct consequences which occurred in the story. These findings support the belief that children can develop their abilities to tell stories through thematic-fantasy play (Sachs, 1980; Rubin, 1980).

In the play condition the experimenter was an active participant in the learning, since she played the role of Red

Cap's mother. This afforded the children the opportunity to view the adult in a role different from the directive-teacher role. The experimenter's active, enthusiastic participation may have encouraged the children to become more involved in the learning than would the experimenter's roles in the discussion and drawing groups.

The discussion condition provided an opportunity for children to reconstruct the story verbally by responding to the experimenter's questions. The discussions encouraged adult to child interactions instead of peer to peer interactions as were encouraged in the play condition. The discussions were more formally structured by the adult than was the play condition, so the children were not as actively involved. They responded only verbally to the experimenter's questions. The children in the discussion group generally included more parts of the story structure in their retellings than did children in the drawing group but fewer parts than did children in the play group. This finding supports the finding (Pellegrini and Galda, 1982) that the story reconstruction which involves social interaction with peers may be more effective in developing comprehension than are methods which do not include such interaction.

The drawing condition provided an opportunity for children to reconstruct the story only graphically. Children did not interact with each other or the adult verbally or physically, nor did they have to accommodate to their peers' views. The children in the drawing condition included the fewest parts of the story structure in their retellings.

The ranking of effectiveness of the three conditions holds some important educational implications. If each teacher's objective is to increase the students' understandings of story structure and comprehension, the teacher needs to implement some activity which involves the students after they have listened to a story. The most effective activity, among the options studied, is thematic-fantasy play in which the students are actively involved in verbally discussing appropriate roles and actions and in accommodating to other students' points of view. Teacher-led discussions of the story during which students reconstruct the story would be somewhat less effective than play in increasing the students' understandings of story structure and comprehension. The least effective method would be graphically representing a story by drawing it. One wonders if drawing had any effect on learning story structure. This could be tested in another study by including a condition during which the children do some activity unrelated to the story for a comparable period of time. The present study indicates that learning which includes an interactive component is more effective in developing some understandings of story structure and comprehension.

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